This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A dynamic handwriting recognition system for a pervasive device comprising:

a touch screen device;

a non-electronic stylus means enabling a user to write on said touch screen, said touch screen generating dynamic information associated with stylus writing;

a digital image capture means mounted in said pervasive device for obtaining images of said non-electronic stylus as said user writes on said touch screen;

means for processing said obtaining images and extracting non screen-related information associated with non-electronic stylus manipulation by said user; and

handwriting recognition means receiving both said dynamic touch screen information and extracted non touch screen-related information from said processed images for recognizing writing of said user, wherein improved handwriting recognition is achieved.

2. (Currently Amended) The dynamic on-line handwriting recognition system as claimed in Claim 1, wherein said extracted non screen-related information include tilt parameters associated with non-electronic stylus manipulation.

3. (Original) The dynamic handwriting recognition system as claimed in Claim 1, wherein said pervasive device comprises a Personal Digital Assistant (PDA) device.

4. (Currently Amended) The dynamic handwriting recognition system as claimed in Claim 2, further including a touch screen control device for generating coordinates of said non-electronic stylus writing upon said touch screen.

5. (Original) The dynamic handwriting recognition system as claimed in Claim 2, wherein said digital image capture means obtains images in a plane perpendicular to a plane defined by said touch screen device.

6. (Original) The dynamic handwriting recognition system as claimed in Claim 4, wherein said pervasive device implements pattern recognition means for extracting said non touch screen-related pen information.

7. (Currently Amended) The dynamic handwriting recognition system as claimed in Claim 6, wherein said non-electronic stylus means includes elements enabling recognition by said pattern recognition means.

8. (Original) The dynamic handwriting recognition system as claimed in Claim 7, wherein said elements enabling pattern recognition includes colored segments in a structure known to said pattern recognition means.

9. (Currently Amended) A method for dynamically performing handwriting recognition in a pervasive device including a touch screen device and a non-electronic stylus means enabling a user to write on said touch screen device, said method comprising the steps of:

a) generating dynamic information associated with non-electronic stylus writing;

b) mounting a digital image capture means in said pervasive device that is adapted to obtain images of said non-electronic stylus as a user writes on said touch screen;

c) processing said obtaining images and extracting non screen-related information associated with non-electronic stylus manipulation by said user; and

d) recognizing writing of said user utilizing both said dynamic touch screen information and extracted non touch screen-related information from said processed images, wherein improved handwriting recognition is achieved.

10. (Currently Amended) The method for dynamically performing handwriting recognition as claimed in Claim 9, wherein said extracted non screen-related information include tilt parameters associated with <u>non-electronic</u> stylus manipulation.

11. (Original) The method for dynamically performing handwriting recognition as claimed in Claim 9, wherein said pervasive device comprises a Personal Digital Assistant (PDA) device.

12. (Currently Amended) The method for dynamically performing handwriting recognition as claimed in Claim 10, wherein step a) of generating dynamic information includes the step of generating coordinates of said <u>non-electronic</u> stylus writing upon said touch screen.

13. (Original) The method for dynamically performing handwriting recognition as claimed in Claim 10, wherein said digital image capture means is mounted to obtain images in a plane perpendicular to a plane defined by said touch screen device.

14. (Currently Amended) The method for dynamically performing handwriting recognition as claimed in Claim 12, wherein said processing step c) includes implementing pattern recognition means for extracting said non touch screen-related <u>non-electronic stylus</u> ~~pen~~ information.

15. (Currently Amended) The method for dynamically performing handwriting recognition as claimed in Claim 14, further including the step of facilitating <u>non-electronic</u> stylus recognition by a pattern recognition device.

16. (Currently Amended) The method for dynamically performing handwriting recognition as claimed in Claim 15, wherein said <u>non-electronic</u> stylus recognition is facilitated by including colored segments in said stylus that is known to said pattern recognition device.

17. (Currently Amended) A pervasive device comprising:

a touch screen device having a handwriting surface;

a stylus means enabling a user to write on said touch screen surface, said touch screen device generating dynamic information associated with <u>non-electronic</u> stylus writing;

a digital image capture means mounted in said pervasive device for obtaining images of said <u>non-electronic</u> stylus as said user writes on said handwriting surface;

a means for processing said obtaining images and extracting non screen-related information associated with <u>non-electronic</u> stylus manipulation by said user; and

a handwriting recognition means receiving both said dynamic touch screen information and extracted non touch screen-related information from said processed images for recognizing writing of said user, wherein improved handwriting recognition for said device is achieved.

18. (Currently Amended) The pervasive device as claimed in Claim 17, wherein said extracted non screen-related information include tilt parameters associated with <u>non-electronic</u> stylus manipulation.

19. (Currently Amended) The pervasive device as claimed in Claim 18, further including a touch screen control device for generating coordinates of said <u>non-electronic</u> stylus writing upon said touch screen.

20. (Original) The pervasive device as claimed in Claim 18, wherein said digital image capture means obtains images in a plane perpendicular to a plane defined by said touch screen device.

21. (Currently Amended) The pervasive device as claimed in Claim 20, wherein said pervasive device implements pattern recognition means for extracting said non touch screen-related non-electronic stylus ~~pen~~ information.

22. (Currently Amended) The pervasive device as claimed in Claim 21, wherein said non-electronic stylus means includes elements enabling recognition by said pattern recognition means.

23. (Original) The pervasive device as claimed in Claim 22, wherein said elements enabling pattern recognition includes colored segments in a structure known to said pattern recognition means.